

claiming benefit or priority herefrom under 35 U.S.C. § 120. After this cancellation and the addition of claim 56, claims 38, 40-51 and 54-56 are pending. See Exhibit B.

Applicant has amended claims 38, 40, 41 and 45 to place them in independent form. Similarly, applicant has amended claims 48-50 to place them in independent form. None of these amendments changes the scope of these claims.

Applicant has also amended claim 42 to depend from any one of claims 38, 40 and 41, rather than from cancelled claim 37. Similarly, applicant has amended claim 46 to depend from any one of claims 38 and 40-45, rather than from cancelled claim 37.

Applicant has amended claim 51 to recite a method for producing a recombinant DNA molecule comprising a DNA sequence selected from the group consisting of the four specific DNA sequences recited in amended claims 40 and 41 and allowed claims 54 and 55. The claimed method comprises the step of culturing a host cell containing at least one recombinant DNA molecule according to claim 40 or 41 under conditions in which the host cell replicates the recombinant DNA molecule. Support for this amendment appears in the specification at, for example, page 9, lines 19-30, and throughout the specification where hosts transfected with the recombinant DNA molecules of this invention are cultured.

Applicant has added claim 56. It recites a method for producing a DNA molecule comprising a DNA sequence encoding an α -type interferon comprising the step of culturing a host cell containing a DNA molecule comprising the DNA sequence of claim 54 or 55 under conditions in which the host cell replicates the DNA molecule. Support for this

amendment may be found in the specification at, for example, page 9, lines 19-30, and throughout the specification where hosts transfected with the DNA molecules of this invention are cultured.

The amendments and added claim presented herein do not constitute new matter.

THE OBJECTIONS

The Notice to Draftsperson's Patent Drawing Review

Applicant acknowledges the Notice of Draftsperson's Patent Drawing Review, appended to the outstanding Office Action (PTO-948; copy enclosed).

Applicant submits with this response thirty-one (31) sheets of formal drawings (Fig. 1 to Fig. 32) to be substituted for the informal drawings originally filed in the above-identified application (Figures 3 and 4 are on the same sheet of drawings). The formal drawings submitted herewith comply with 37 C.F.R. § 1.84. No new matter has been added.

Thus, the objection has been obviated. Applicant requests its withdrawal and the entry of the formal drawings.

Rejected Base Claim: Claims 38-41, 45 and 48-50

The Examiner has objected to claims 38-41, 45 and 48-50 as dependent upon a rejected base claim. He has indicated, however, that the claims would be allowable "if rewritten in independent form." In accordance with the Examiner's suggestion, applicant has

overcome these objection by rewriting claims 38, 40-41, 45 and 48-50 (claim 39 was cancelled) in independent form and to include all of the limitations of the base claim. None of these amendments changes the scope of the claims.

THE REJECTIONS

Double Patenting Rejection: Claims 37, 42-44, 46, 47, 51 and 52

Claims 37, 42-44, 46, 47, 51 and 52 stand rejected under the judicially-created doctrine of obviousness-type double patenting as unpatentable over claims 1-18 of United States Patent 4,530,901 (“the ‘901 patent”). Specifically, the Examiner states that, although the conflicting claims are not identical, they are not patentably distinct because the DNAs of the ‘901 patent would hybridize to the DNAs mentioned in the instant claims, e.g., the DNAs in claims 37(b) and 51(b).

Applicant has rendered the rejection of claims 37 and 52 moot by canceling those claims. Applicant has amended claim 42 and claim 46 so that they no longer depend from cancelled claim 37. As amended, those claims no longer include the “hybridizing” language pointed to by the Examiner. This overcomes the rejection as to claims 42 and 46.

Applicant has amended claim 51 to recite a method of producing a recombinant DNA molecule comprising the specific DNA sequences of amended claims 40-41 and allowed claims 54-55. The claim no longer recites the “hybridizing” language pointed to by the Examiner.

As amended, claims 42-44, 46, 47 and 51 no longer recite hybridization language, nor do they depend from claims reciting such language. Consequently, these claims are patentably distinct from claims 1-18 of the '901 patent. Applicant respectfully requests that the Examiner withdraw the obviousness-type double patenting rejection of claims 42-44, 46, 47 and 51.

35 U.S.C. § 102(e) Rejection: Claims 37, 42-44, 46, 47, 51 and 52

This application is being examined under 35 U.S.C. § 102(e) as it read prior to its amendment by the AIPA because this application was neither (1) filed on or after November 29, 2000 nor (2) voluntarily published under 35 U.S.C. § 122(b).

Claims 37, 42-44, 46, 47, 51 and 52 stand rejected under 35 U.S.C. § 102(e) as anticipated by Goeddel *et al.*, United States Patent 6,482,613 ("Goeddel"). Specifically, the Examiner states that the DNAs of Goeddel encode various forms of IFN- α and would hybridize to the DNA inserts mentioned in the claims, such as claims 37 and 51. Furthermore, the Examiner states that Goeddel teaches the expression of DNAs encoding IFN- α using various expression vectors and host cells, as claimed, as well as the direct expression of IFN- α without a presequence. The Examiner asserts that the earliest filing date to which the instant claims are entitled is January 7, 1981, the filing date of application 06/233,108, while Goeddel is entitled to the July 1, 1980 filing date of application 06/164,986. Applicant disagrees, but for the purposes of this response, the date to which either applicant or Goeddel may be entitled does not matter.

The rejection of claims 37 and 52 is moot in view of applicant's cancellation of those claims. As discussed above, applicant has amended claims 42 and 46 so that they no longer depend from cancelled claim 37. Instead, amended claim 42 (and its dependent claims 43 and 44) depend from any one of amended claims 38, 40 and 41, which recite recombinant DNA molecules comprising specific DNA sequences. Similarly, amended claim 46 (and its dependent claim 47) depend from any one of amended claims 38 and 40-45, which also recite recombinant DNA molecules comprising specific DNA sequences. In addition, applicant has amended claim 51 to recite a method of producing a recombinant DNA molecule comprising one of these specific DNA sequences. Added claim 56 likewise recites only specific DNA sequences.

A claim is anticipated if, and only if, each and every recited element is found, either expressly or inherently, in a single prior art reference. Verdegaal Bros., Inc. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Goeddel does not disclose the specific recombinant DNA molecules recited in amended claims 42, 46 and 51 (or claims 43, 44 and 47, which depend therefrom). Thus, for the same reasons that Goeddel does not anticipate pending claims 40-41 and 54-55, Goeddel does not anticipate any of the amended claims. Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of those claims under 35 U.S.C. § 102(e).

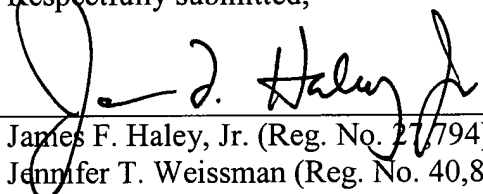
Additional Comments And Information Disclosure Statement

Applicant notes that the amino acid sequence of SEQ ID NO:53 recited in Goeddel is identical to the amino acid sequence encoded by the second of the DNA sequences of pending claims 40 and 54 of this application, i.e., IFN- α 2b. In addition, applicant notes that in claim 10, Goeddel claims a DNA sequence that encodes that amino acid sequence. And, in claim 19, Goeddel claims a method of producing the polypeptide coded for by that DNA sequence.

CONCLUSION

In view of the foregoing amendments and remarks, applicant requests that the Examiner withdraw all of the outstanding objections and rejections and allow the pending claims.

Respectfully submitted,



James F. Haley, Jr. (Reg. No. 27,794)
Jennifer T. Weissman (Reg. No. 40,868)
Attorneys for Applicant
Connie Wong (Limited Recognition)
Agent for Applicant
c/o FISH & NEAVE
Customer No. 1473
1251 Avenue of the Americas
New York, New York 10020-1105
Tel.: (212) 596-9000
Fax: (212) 596-9090